Amendments to the Claims:

1. (Currently Amended) A system of controlling and triggering a TRIAC (TR), the TRIAC comprising a gate (G), the TRIAC (TR) being connected to a load, the gate (G) being electrically connected to a power unit ~~(3)~~ that actuates the TRIAC (TR) for selectively applying a network voltage (V_{AC}) to the load and enabling the circulation of an electric current (i_c) in the load, the system comprising:

- a voltage detection unit for detecting gate ~~(1)~~ voltage;
- a detection unit for detecting ~~the~~ passage of the feed network voltage ~~(2)~~ by zero;
- a power unit ~~(3)~~; and
- a control unit ~~(4)~~;

the voltage detection unit ~~(1)~~ being electrically connected to the control unit ~~(4)~~,

the control unit ~~(4)~~ establishing [[a]] an adjustable gate (G) voltage limit value (+limit, -limit), and generating a pulse at the gate (G) of the TRIAC (TR) to keep it in conduction,

the pulse at the gate (G) being generated from a comparison between the voltage limit value (+limit, -limit) established by the control unit ~~(4)~~ and a voltage measured at the gate (G) from the gate ~~(1)~~ voltage detection unit.

2. (Currently Amended) A system according to claim 1, wherein the control unit ~~(4)~~ measures the electric current (i_c) and adjusts the voltage limit value (+limit, -limit) in a proportional way to the current (i_c) value measured.

3. (Currently Amended) A control system according to claim 2, wherein the control unit ~~(4)~~ generates the pulse at the gate (G) of the TRIAC (TR) in previously established a measurement time (t_M), the measurement time (t_M) occurring before ~~the~~ passage of the current (i_c) by zero.

4. (Currently Amended) A system according to claim 2, wherein the control unit ~~(4)~~ obtains the current (i_c) value from a current sensor ~~(5)~~.

5. (Previously Presented) A system according to claim 2, wherein the adjustment of the limit value (+limit, -limit) is made by means of the equation: $\pm Limit = k \times I_c$, wherein k is a previously determined proportionality constant.

6. (Currently Amended) A system according to claim 2, wherein the adjustment of the limit (+limit, -limit) is made by means of a table of preestablished values stored in the control unit ~~(4)~~.

7. (Currently Amended) A system according to claim 1, wherein the detection unit ~~(1)~~ for detecting voltage at the gate (G) comprises a comparator (CP_1) electrically connected to the gate (G) of the TRIAC (TR) and to a digital-to-analog (D/A) converter, the comparator (CP_1) receiving the signal of the voltage at the gate (G) of the TRIAC (TR) and a signal generated by the D/A converter, the D/A converter receiving a digital signal generated by ~~the~~ a control central ~~(44)~~, the signal generated by the control central ~~(44)~~ establishing an adjustment voltage value, the adjustment voltage value being equal to the limit values (+limit, -limit).

8. (Currently Amended) A system according to claim 7, further comprising a power unit ~~(3)~~, the power unit ~~(3)~~ being associated to the control unit and generating a voltage pulse at the gate of the TRIAC (TR) upon a command from the control central ~~(44)~~.

9. (Currently Amended) A system according to claim 7, wherein the control unit ~~(4)~~ comprises a digital-to-analog (D/A) converter, the digital-to-analog converter generating the adjustment voltage value.

10. (Currently Amended) A system according to claim 8, wherein the pulse at the TRIAC (TR) is generated when the control central ~~(44)~~ detects a transition of level of the comparator (CP_1) output.

11. (Currently Amended) A system according to claim 8, wherein the control central ~~(44)~~ commands the digital-to-analog (D/A) converter to commute between a positive voltage limit (+limit) to a negative limit (- limit) and vice-versa at every transition received by the comparator

(CP_1).

12. (Previously Presented) A system according to claim 8, wherein the voltage of the gate (G) of the TRIAC (TR) is applied to the comparator (CP) by means of a resistive divider (R_1, R_2).

13. (Previously Presented) A system according to claim 12, wherein the resistive divider (R_1, R_2) is formed by resistors of the same value.

14. (Currently Amended) A system according to claim 7, wherein the digital-to- analog (D/A) converter is internal with respect to the control central ~~(44)~~.

15. (Currently Amended) A system according to claim 7, wherein the comparator (CP_1) is internal with respect to the control central ~~(44)~~.

16. (Currently Amended) A system according to claim 7, wherein the power control unit ~~(3)~~ is an internal switch of the control central ~~(44)~~.

17. (Currently Amended) A method of controlling the triggering of a TRIAC (TR), the TRIAC comprising a gate (G) and being electrically connected to a network voltage (V_{AC}),

the TRIAC (TR) being selectively actuated upon a pulse at the gate (G) to apply the network voltage (V_{AC}) to a load, enabling the circulation of a current (ic),

a single comparator (CP_1) being associated to the gate (G) of the TRIAC (TR),

the method comprising:

applying a pulse at the gate (G) when the voltage limit value (+limit, - limit) at the gate (G) has been detected, the pulse being generated from a transition at the comparator (CP_1), the comparator (CP_1) comparing the voltage limit ~~voltage~~ value (+limit, -limit) at the gate (G) and a voltage measured at the gate (G),

commuting an input of the comparator (CP_1) from the positive voltage limit (+limit) ~~and~~ to a negative limit (-limit) and vice-versa at every transition received by the comparator (CP_1).

18. (Previously Presented) A method according to claim 17, wherein, prior to the step of

applying the pulse at the gate (G), said method comprises the steps of:

measuring the current (i_c) circulating in the load, and

adjusting the level of the voltage value at the gate (+limit, -limit) proportional to the level of the current (i_c)

19. (Previously Presented) A method according to claim 18, wherein, in the step of adjusting the voltage limit value (+limit, -limit), the equation: $\pm Limit = k \, x \, i_c$ is applied, wherein k is a proportionality constant.

20. (Previously Presented) A method according to claim 18, wherein, in the step of adjusting the voltage limit value (+limit, -limit), there is a step of reading a table of pre-established values.

21. (Previously Presented) A method according to claim 18, wherein the voltage pulse at the gate (G) has a duration sufficient for the current circulating in the TRIAC (TR) to reach a latch value.

22. (Previously Presented) A method according to claim 21, wherein the first pulse of the gate (G) is commanded from a measurement of passage of the network (V_{AC}) by zero.

23. (Currently Amended) A method of controlling the triggering of a TRIAC (TR), the TRIAC comprising a gate (G) and being electrically connected to a network voltage (V_{AC}),

the TRIAC (TR) being selectively actuated upon a pulse at the gate (G) to apply the network voltage (V_{AC}) to a load, enabling the circulation of a current (i_c),

the method comprising the steps of:

applying a pulse at the gate (G) when the current value (i_c) reaches a minimum value, establishing a voltage limit value (+limit,-limit) at the gate (G) to generate the pulse at the gate (G) of the TRIAC (TR) for keeping it in conduction, the pulse at the gate (G) being generated in a previously established measurement time (t_M), the measurement time (t_M) occurring before ~~the~~ passage of the level of the current (i_c) by zero,

measuring the current (i_c) that circulates in the load, and

adjusting the level of the voltage limit value (+limit, -limit) at the gate (G) by a control unit in a proportional way to level of the current (i_c).

24. (Previously Presented) A method according to claim 23, wherein the current (i_c) is continuously measured.

25. (Previously Presented) A method according to claim 24, wherein, in the step of applying the pulse at the gate (G) of the TRIAC (TR_1), regulating the level of voltage in the load from the delay in generating the pulses at the gate (G).